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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,070	10/29/2003	Keith Alan Hankin	50277-2241	8121
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	an D. Hickman LERMO TRUONG & BE	/ %	LIE, ANC	GELA M
1600 Willow St		CKER LLP JUN 1 6 2006	ART UNIT	PAPER NUMBER
San Jose, CA	95125-5106		2163	· <u>-</u> ·
		TRABEMAN	DATE MAILED: 06/07/2006	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commons	10/697,070	HANKIN, KEITH ALAN					
Office Action Summary	Examiner	Art Unit					
	Angela M. Lie	2163					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. lely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 29 Oc	ctober 2003.						
	action is non-final.						
3) Since this application is in condition for allowar		secution as to the merits is					
closed in accordance with the practice under E							
Disposition of Claims							
4) Claim(s) <u>1-26</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdray	n from consideration.						
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-26</u> is/are rejected.	☑ Claim(s) <u>1-26</u> is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.	-					
Application Papers							
9) The specification is objected to by the Examine	r.						
10)⊠ The drawing(s) filed on 29 October 2003 is/are:	a)⊠ accepted or b)☐ objected	to by the Examiner.					
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correct							
11) The oath or declaration is objected to by the Ex							
Priority under 35 U.S.C. § 119							
·	priority under 25 H S C & 110/p	(d) or (f)					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 0.5.C. § 119(a)	i-(a) or (i).					
1. ☐ Certified copies of the priority documents	s have been received						
		on No					
2. Certified copies of the priority documents							
3. Copies of the certified copies of the prior		ed in this National Stage					
application from the International Bureau	, , , , ,						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.					
Attachment(s)	∴ □ □ □ □ □	(BTO 442)					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal P	ratent Application (PTO-152)					
Paper No(s)/Mail Date <u>1/30/2006</u> .							

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DETAILED ACTION

Claim Objections

- 1. The claims 7 and 20 are objected for following informalities:
- 2. The phrase "one or more second clients" was not specified in any of the proceeding claims. For the purposes of the examination, the examiner interprets the above noted phrase as a database.
- 3. The appropriate corrections are required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 5. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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6. <u>Claims 1-11,13-24 and 26 are rejected under 35 U.S.C. 102(e) as being</u> anticipated by Chinta et al (US Patent 6879995).

As to claims 1 and 14, Chinta discloses a method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, comprising: storing at a first database server (Figure 2C, 108A) a first set of space usage data that reflects the amount of free space associated with the database (Figure 2C, 110); retrieving, from one or more second database servers (Figure 2C, 108B), a second set of space usage data (the system as taught by Chinta has a capacity to access different partitions of the database storage i.e. first and second spaces) that reflects the amount of free space associated with the database (Figure 2C, 110); updating the first set of space usage data with the second set of space usage data (the system as shown in figure 2C has a capacity of updating data, column 39, lines 53-56); and evaluating the usage of space in the database based on the updated first set of space usage data (column 39, lines 42-56, in order to determine if login operation can be performed or resumed, the evaluation of database must be performed).

As to claims 2 and 15, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, wherein the first set of space usage data and the second space usage data each reflect the amount of free space in one or more tablespaces that are each associated with the database (column 37, lines 50-51 and column 39, lines 53-56).

As to claims 3 and 16, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a

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database, wherein the first set of space usage data and the second space usage data each reflect the amount of free space in one or more files (wherein database table is associate with a file) that are each associated with the database (column 37, lines 50-51 and column 39, lines 53-56).

As to claims 4 and 17, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, wherein the first set of space usage data is updated based on changes made to the database by the first database server (Figure 23), and wherein the second set of space usage data is updated based on changes made to the database by the one or more second database servers (the second server is also an application server and has a capability to perform the same function as the first server which is referred to flow chart shown in the figure 23).

As to claims 5 and 18, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, wherein the step of storing the first set of space usage data comprises: storing a subset of the first set of space usage data (Figure 23, steps 502 and 504, and wherein server (108A or 108B) has a capacity to store the data), wherein each subset is associated with a transaction initiated by the first database server (prior to update space check there is a log in service associated with the application server, so that is the indication that the space check in the database should be performed) that is performed on the database.

As to claims 6 and 19, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, wherein the step of storing the first set of space usage data comprises: examining the database to generate the first set of space usage data (column 5, lines 13-16).

As to claims 7 and 20, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, wherein the step of retrieving the second set of space usage data comprises: determining that a configurable period of time has expired (Figure 23, step 502, wherein the space check occurs periodically, i.e. set time; paragraph 39, lines 53-56), wherein the configurable period of time indicates an amount of time to wait before retrieving second the second set of space usage data from one or more second clients.

As to claims 8 and 21, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, wherein the step of evaluating the usage of space in the database comprises: determining if a tablespace in the database has exceeded a configurable threshold (column 40, lines 25-31; wherein the amount if remaining storage space that is associated with low level of storage space is considered to be threshold).

As to claims 9 and 22, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, comprising: raising an alert that indicates that the usage of space in a

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tablespace in the database has exceeded a configurable threshold (column 40, lines 11-16).

As to claims 10 and 23, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, comprising: in response to the step pf evaluating of the usage of space in the database, scheduling space reclamation for the database (Figure 23, step 510).

As to claims 11 and 24, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, wherein the database is in a distributed cluster if databases (as shown in figure 2A application servers and main database are all connected (cluster), since application servers have storage capability the can also be considered a database (server for storing data)).

As to claims 13 and 26, Chinta discloses the method and a computer- readable medium carrying one or more sequences for determining the usage of space in a database, wherein the steps of retrieving, updating, and evaluating may be repeated in sequence after a configurable amount of time lapses the step of evaluating was last performed (as shown in figure 23, if the system is not our of space (step 504) the flow chart loops so that the steps of checking and evaluating can be performed again).

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chinta et al (US Patent 6879995) in the view of Levine et al. (US Publication 20030177187). Chinta teaches all the limitations disclosed in claims 1 and 14, except for the database being in a grid of databases. Levine heals this deficiency by teaching computing grid for massively multi-user immersive persistent-state and session based applications (Figure 7). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to use a database in a grid of databases in the Chinta's monitoring system because as taught by Levine computing grid speeds up the access time and improves functionality of the network.

The Prior Art

- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- US Publication 20040158573 discloses methods and apparatus for management of data storage resources.

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Inquiry

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Angela M Lie

WILSON LEE PRIMARY EXAMINER

Notice of References Cited Application/Control No. 10/697,070 Applicant(s)/Patent Under Reexamination HANKIN, KEITH ALAN Examiner Angela M. Lie 2163 Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-6,879,995	04-2005	Chinta et al.	709/204
	В	US-2004/0158573	08-2004	Bradley et al.	707/102
	С	US-6,035,306	03-2000	Lowenthal et al.	707/200
	D	US-2005/0066134	03-2005	Tormasov et al.	711/151
	E	US-2004/0019662	01-2004	Viswanath et al.	709/220
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FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

INFORMATION DISCLOSURE CITATION TO 1440)

ATTY, DOCKET NO.	SERIAL NO.
50277-2241	10/697,070
APPLICANT:	
Keith Alan Hankin	
FILING DATE:	GROUP:
October 29, 2003	2171 2163

(PTO-1449)

Exam. Initial*	Cite No. ¹	Office ³	reign Patent Do Number ⁴	Kind Code ³ (If known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
AL		EP	0518574	A2	IBM Corporation	12-16-1992		

		OTHER ART – NO PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
AL		INTERNATIONAL SEARCHING AUTHORITY, "Notification of Transmittal of the International Search Report and the Written Opinion of the International Searching Authority, or the Declaration," PCT/US2004/036122, dated 01-05-2006, 13 pages,	
AL		Current Claims, PCT/US2004/036122, dated January 24, 2006, 4 pages	
AL		ORACLE CORPORATION, "Oracle9i – Database Concepts, Release 2 (9.2)," part No. A96524-01, March 2002, XP002360772, 70 pages.	
AL		ORACLE CORPORATION, "Oracle9i – Database Performance Tuning Guide and Reference Release 2 (9.2)," Part No. A96533-01, March 2002, XP002360773, 52 pages.	
AL		ORACLE CORPORATION, "The Self-Managing Database: Proactive Space & Schema Object Management," An Oracle White Paper, November 2003, XP002360725, pp. 3-20.	

Examiner		Date Considered	05/24/2006
Signature	/Angela Lie/		03/24/2000

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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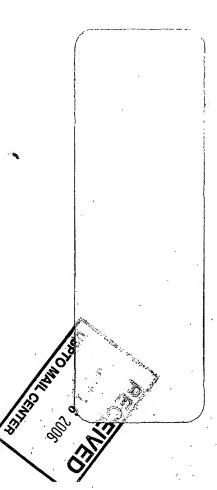
¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁴Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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